Student Acceptance of the BYOND by BSI Digital Banking Application: A TAM-Based Descriptive Study

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Abstract. This study aims to measure the level of user acceptance of BYOND, a digital banking application developed by Bank Syariah Indonesia (BSI), among university students. The research adopts the Technology Acceptance Model (TAM), incorporating four key constructs: perceived usefulness, perceived ease of use, attitude toward using, and subjective norm. A quantitative descriptive approach was applied through a survey distributed to 100 students from the Digital Marketing Program at Universitas Negeri Jakarta. Data were collected using a structured questionnaire based on validated TAM indicators and analyzed using descriptive statistics with SPSS 25. The results show that student acceptance of BYOND is in the "high" category. Among the four constructs, attitude toward using received the highest average score, followed by perceived usefulness. These findings suggest that students demonstrate a favorable perception and attitude toward the application, while the influence of subjective norms is relatively lower. The study confirms the relevance of TAM in explaining user acceptance in the context of sharia-based digital banking and provides practical implications for optimizing the application's engagement strategy among Generation Z users.

Keywords: BYOND, Digital Banking, Technology Acceptance Model, User Acceptance, Gen Z

Introduction

The rapid development of digital technologies has significantly transformed the banking industry. Traditional banking services are increasingly replaced by mobile-based applications that offer convenience, speed, and accessibility. In Indonesia, digital banking has grown remarkably, especially among Generation Z users who are digital natives and highly adaptive to technology-driven financial services (OJK, 2022). According to Bank Indonesia (2023), over 70% of daily banking transactions in urban areas are now conducted through digital platforms, marking a shift in user behavior toward mobile-first interactions.

In response to this trend, Bank Syariah Indonesia (BSI) launched BYOND, a digital banking application designed to serve the needs of modern Muslim consumers. BYOND aims to be a sharia-compliant "super app," integrating core banking functions with e-wallet services, financial management, and Islamic philanthropic features such as zakat and waqf. Although BYOND targets younger users with its intuitive interface and lifestyle-focused design, its success depends not only on technological sophistication but also on user acceptance and willingness to adopt the platform.

Despite its innovation, internal reports indicate that the activation rate of BYOND among student segments remains below expectations (BSI, 2023). This reveals a potential gap between the intended

value proposition and user perception, particularly among university students—a demographic expected to be highly receptive to fintech innovations. Understanding the factors influencing user acceptance is therefore essential for enhancing the application's impact and engagement.

To address this issue, the present study employs the Technology Acceptance Model (TAM) developed by Davis (1989), which posits that perceived usefulness (PU) and perceived ease of use (PEOU) significantly affect users' attitudes and behavioral intentions toward using technology. This model has been widely validated in the context of mobile banking adoption (Zhou et al., 2022; Shaikh & Karjaluoto, 2021). The study further incorporates attitude toward using (ATU) and subjective norm (SN) to provide a more comprehensive understanding of acceptance in a social context.

This study aims to assess the level of acceptance of BYOND among students of the Digital Marketing Study Program at Universitas Negeri Jakarta. By analyzing the perceived usefulness, ease of use, attitude, and social influence, the study seeks to provide both theoretical insights and practical implications for optimizing user engagement strategies in sharia-based digital banking applications.

Methods

1. Research Design

This research applied a quantitative descriptive approach to analyze the level of student acceptance toward the BYOND digital banking application. A survey method was employed to collect primary data using a structured questionnaire. The study framework was based on the Technology Acceptance Model (TAM), incorporating four key constructs: perceived usefulness (PU), perceived ease of use (PEOU), attitude toward using (ATU), and subjective norm (SN). Each construct was operationalized through four validated indicators adapted from previous studies.

2. Population and Sample

The population in this study consisted of active students enrolled in the Digital Marketing Study Program at Universitas Negeri Jakarta. Due to the unknown total population size, the sample size was determined using the Lemeshow formula with a 95% confidence level and a 10% margin of error (Somantri, 2022). The minimum required sample was 96 respondents, rounded up to 100 to ensure representativeness. Purposive sampling was used, with the main criteria being students who had used or were familiar with the BYOND application.

3. Data Collection

Data were collected using an online questionnaire distributed via Google Forms. The questionnaire was designed using a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree. The instrument was structured into four sections corresponding to each TAM construct. Each item was adapted from prior empirical research indexed in Scopus and published within the last five years (Zhou et al., 2022; Chatterjee et al., 2023; Shaikh & Karjaluoto, 2021).

4. Instrument Validity and Reliability

To ensure content validity, the indicators used were drawn from validated scales in established TAM-based studies. Construct validity was tested through item-total correlation using Pearson's correlation coefficient. Items with r-value greater than the critical r-table value (α = 0.05, n = 100) were considered valid. Reliability testing was conducted using Cronbach's Alpha. A reliability coefficient of α > 0.60 was considered acceptable for each variable (Hair et al., 2021).

5. Data Analysis Technique

The collected data were processed and analyzed using SPSS version 25. Descriptive statistics were used to compute mean scores and interpret the levels of acceptance based on the following interval formula:

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Interval Width = (Maximum Score – Minimum Score) \div Number of Categories = (4-1) \div 4 = 0.75
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Thus, interpretation of scores was categorized as:

1.00-1.75 = Very Low

1.76-2.50 = Low

2.51-3.25 = High

3.26-4.00 = Very High

Result and Discussion

1. Descriptive Results

This study involved 100 student respondents from the Digital Marketing Study Program at Universitas Negeri Jakarta. The data collected were measured across four constructs of the Technology Acceptance Model (TAM): Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Attitude Toward Using (ATU), and Subjective Norm (SN), each consisting of four indicators. Respondents provided responses using a 4-point Likert scale ranging from 1 = strongly disagree to 4 = strongly agree.

Table 1 presents the simulated responses from 100 students across all 16 items. This data set serves as the foundation for analyzing students' perception of the BYOND application.

No. PU1	PL	U2	PU3	PI	U4	PEOU1	PEOU2	PEOU3	PEOU4	ATU1	ATU2	ATU3	ATU4	SN1	SN2	SN3	SN4
1	3.4	2.63		3.34	2.87	2.4	16 3.57	3.6	2.89	3.78	3.4	5 4.0	3.8	2.95	2.50	3 2.5	53 3
2	3.14	3.03		3.42	2.98	2.8	3.96	2.93	3.52	3.19	3.1	4 3.87	2.24	2.73	3.1	3.1	16 2
3	3.46	3.06		3.63	3.5	3	.1 2.64	3.65	2.82	3.44	3.3	3.52	4.0	2.95	2.73	3.4	12 2
4	3.81	2.88		3.62	3.44	3.1	12 3.43	3.84	2.54	3.22	3.8	1 3.24	3.34	3.12	2.5	3.2	24
5	3.11	3.14		2.65	3.19	2.9	92 2.94	3.47	2.48	3.23	3.3	8 3.78	3.84	2.92	3.0	3.3	35 2
6	3.11	3.36	- 2	2.82	3.25	3.3	3.01	4.0	3.34	3.28	3.3	2 3.66	2.98	2.92	2.4	2.6	65 2
7	3.83	3.95		3.41	3.71	2.6	7 2.96	2.99	2.59	3.49	2.7	6 3.86	3.65	2.62	2.83	2.3	38 3
8	3.51	3.27		3.41	2.96	3.0	04 2.85	2.8	3.8	3.21	3.	6 3.75	2.98	2.63	2.1	3.5	55 3
9	3.01	3.3		3.41	3.42	3.1	15 3.22	2.59	2.27	3.9	3.5	6 3.92	3.15	2.34	3.23	3 2.8	32 3
10	3.42	3.17		4.0	3.12	3.3	31 2.87	3.9	3.78	3.04	4.	.0 3.29	4.0	3.6	2.99	2.8	35 3
11	3.01	2.43	3	3.43	3.11	3.3	3.31	3.56	3.18	3.33	3.1	.8 4.0	3.32	2.4	2.79	3.4	18 2
12	3.01	3.19		3.65	3.64	2.6				3.22							
13	3.3	3.22		3.58	3.53	2.4				3.98				2.61			
14	2.43	4.0		3.46	3.53	3.6		2.85	3.26	3.48				3.26	3.00		
15	2.51	3.12		3.07	3.72	3.4				3.81							
16	2.98	3.32		3.5	3.21	2				2.81							
17	2.79	3.19		2.89	3.47	3.7			3.15	3.51							
18	3.33	2.73		3.11	3.08	3.1		3.59	3.16	3.76				3.01			
19	2.84	3.66		3.01	3.33	3.5	57 3.24	3.49	2.95	3.43	3.1	2 3.3	3.48	2.57	2.50	3.5	
20	2.64	3.5		3.23	3.15	3.1				3.83							
21	3.79	3.52		4.0	3.24	3.9		2.98	3.22	3.19							
22	3.11	2.84		2.45	3.44	3				3.96							
23	3.23	3.76		3.47	2.87	3				4.0							
24	2.63	2.64		2.55	4.0	3.4				3.25							
25	2.98	3.43		3.01	2.8	3.3			3.17	3.23							
26	3.24	4.0		3.64	2.71	3.6				3.98							
27	2.74	2.8		3.23	3.66	2.7				4.0							
28	3.35	2.97		2.77	3.52	3.3				3.19							
29	2.96	3.24		2.91	3.45	3.5				3.23				3.29			
30	3.08	3.24		3.47	3.45	2				3.29							
31	2.96																
32	3.94	2.58		2.91	3.2	2.6				2.86							
32	3.94	3.23		3.29	2.84	2.2			2.71 3.26	3.03							
		2.78								3.0							
34	2.78	3.39		2.94	2.93	3.5				3.09							
35	3.53	2.83		4.0	3.59	3				3.39							
16	2.71	3.82		3.45	3.14	3.1				3.49				3.56			
37	3.28	2.89			2.87	3.7		3.63			2.0			3.57			
38	2.42	3.07		3.27	3.07	2.5				3.0							
39	2.67	3.53		2.94	3.37	2.4				3.79							
10	3.28	2.71		3.54	2.97	3.0				3.31							
11	3.5	3.29		2.88	2.87	3.2											
2	3.27	3.72		3.15	3.3	3.0				3.67							
13	3.15	2.56		3.4	3.3	2.2				2.95							
14	3.08	3.27		3.55	3.0	3.0			3.11	3.55							
15	2.61	3.3		2.72	3.01	2.5				3.47							
6	2.91	3.51		3.07	3.29	3.3				3.6							
17	3.02	2.71		3.01	2.62	3.2				3.52							
18	3.62	2.67		2.94	2.64	2.7		3.28	2.8	4.0							
49	3.34	3.41	3	3.91	2.91	2.8	3.35	3.21	2.86	3.14	3.2	8 4.0	4.0	2.99	2.25	3.4	15 3
50	2.49	3.32	3	3.36	3.11	2.6	38 2.96	3.58	2.54	3.19	3.	.4 4.0	3.06	2.28	2.7	2.9	96 3

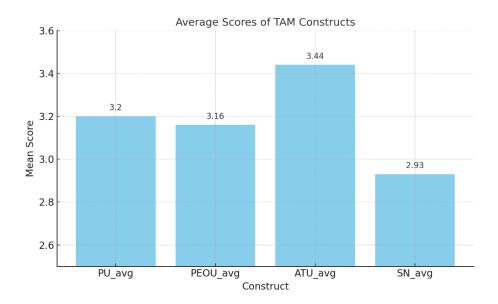
lo. PU1		PU2	PU3	PU	14	PEOU1	PEOU2	PEOU3	PEOU4	ATU1	ATU2	ATU3	ATU4	SN1	SN2	SN3	SN4
51	3.33	3.3		2.7	3.32		3.07 3.2	3 4.0	2.73	3.15	3.3	2 3.25	3.0	3.03	2.3	3.0	17
2	3.05	3.34		3.57	3.79		3.48 3.1	4 3.75	5 2.56	3.18	3.4	4 3.66	2.54	3.23	2.0	3.6	i3
3	2.93	2.93		4.0	3.54		2.71 3.6	7 3.19	2.71	3.15	2.1	3 3.7	3.14	2.1	3.0	2 3.0	15
	3.44	3.29		3.61	3.14		3.3 3.	3 2.86	3.52	3.88	3.8	3.6	2.87	3.05	3.	1 3.9	19
5	3.61	3.32	- 2	2.59	3.19		2.89 3.3	4 4.0	2.72	3.97	3.2	7 3.28	4.0	3.39	2.5	7 3.1	.8
5	3.57	2.91		3.01	2.8		2.78 3.0	4 3.33	2 4.0	3.17	3.75	5 3.23	3.8	2.42	1.7	5 2.2	:5
,	2.86	3.95		3.71	3.19		3.06 3.	0 3.31	3.3	3.07	3.4	4 3.49	3.12	3.57	2.5	3 3.2	:5
3	3.08	3.39		2.92	3.08		2.69 3.0	3 3.29	3.17	3.59	3.41	3.97	4.0	3.07	2.9	3.	1
9	3.33	2.72		3.38	3.33		2.88 3.3	6 3.38	3 2.76	3.18	3.53	3 3.72	3.79	2.62	2.2	1 3.4	7
	3.59	3.46		3.51	2.87		2.62 3.0	3 3.24	3.38	3.65	3.41	3.35	3.27	2.88	2.8	7 3.2	2
	3.01	2.81		2.83	3.41		3.89 3.3	2 3.07	7 2.87	3.48	3.5	3.81	2.4	3.12	2.7	2.8	9
2	3.13	3.51	- 3	3.18	3.81		3.11 4.		3.15	2.79				2.93	3.0		6
3	2.76	3.66		1.9	3.16		2.82 3.5	5 3.29	4.0	4.0	3.3	3.96	2.84	3.12	2.8	5 2.8	7
	2.72	2.87	- 1	2.79	3.36		3.19 3.0	7 3.00	3.06	4.0	3.50	3 2.8	2.74	2.53	2.4	1 2.6	1
5	3.53	3.59		3.1	3.48		3.06 3.6	8 3.01	3.56	3.15	3.20	3.36	3.81	2.97	3.2	3 2.7	2
	3.74	3.37		2.7	3.04		3.01 3.0	4 3.34		3.24	3.8	3.05	4.0	2.33	2.7	4 3.1	.9
	3.17	3.53		3.85	3.29		3.35 2.3			3.51				2.86	2.7		
	3.6	3.96		2.63	3.21		3.4 2.			3.53				2.54	2.4		
	3.34	3.1		3.02	3.24		2.89 2.4			3.66	3.2	3 3.31	3.64	2.61	2.6		7
	2.94	2.9		3.25	2.89		2.87 3.0	6 3.74	3.82	4.0	2.73	3 3.64	3.74	3.39	2.4	5 3.1	.3
	3.34	2.84		3.78	3.21		2.99 3.2	1 3.8	3 3.38	3.33	3.3	5 3.48	3.7	3.34	2.7	3 3.4	3
	3.82	2.87		2.63	3.4		2.18 3.8	7 2.47	7 2.88	3.08	3.00	3 3.69	3.51	3.14	3.4	3 2.7	1
	3.19	3.17		3.67	3.78		2.49 3.3	3 3.16	3.35	2.85	3.64	4 3.53	3.44	2.46	2.2	5 2	.9
	3.83	3.34		3.2	3.58		3.65 3.1			3.11				2.77	2.1		
	2.15	3.31		2.81	4.0		3.76 3.5							3.39	3.3		
	3.53	3.53		3.38	2.89		3.0 2.3			4.0				2.96	2.7		1
	3.23	3.21		3.28	3.55		3.33 3.2			3.19				3.83	2.5		
	3.08	3.78		2.96	3.27		3.22 3.5			3.49				3.06	3.2		
	3.24	3.09		3.23	4.0		4.0 2.6	1 3.67	7 3.07	3.39	2.6	7 4.0	3.0	2.98	2.5	5 2	.6
	2.4	4.0		3.05	2.88		3.55 3.6			3.88				2.78	3.5		
	3.11	3.45		3.25	2.86		3.05 3.3			4.0				2.95	3.0		
	3.34	2.86		3.46	2.96		2.72 3.0			3.19				2.84	2.		.8
	3.79	2.77		3.83	2.35		2.46 3.4			3.2				3.18	3.6		
	2.99	3.39		2.7	2.99		3.18 4.			3.82				3.28	2.5		
	2.88	3.11		4.0	2.9		2.8 3.2			3.67	3.3			2.59	3.		
	3.0	3.49		2.42	3.26		2.53 3.			4.0				2.37	2.9		
	3.57	3.39		3.14	3.34		2.84 3.0			3.63				2.17	3.3		
	3.33	3.17		3.44	3.95		2.67 2.8			3.26				3.1	3.4		
	2.99	2.86		3.31	3.58		3.77 3.5			3.64				2.46	2.8		
	3.41	2.59		2.95	2.97		3.45 2.8			3.84				2.04	2.		
	3.24	3.02		3.12	2.84		3.1 3.2			3.73				3.06	2.9		
	3.59	3.54		3.0	3.4		3.69 3.0			3.6		-		3.9	2.5		
	2.92	3.29		2.96	2.67		3.13 3.3			3.83				2.9	3.6		
	3.07	2.7		3.54	3.93		2.76 3.3			3.87	3.0			3.24	2.8		
	3.04	3.27		3.34	3.67		3.71 3.6			3.95				2.93	2.6		
	2.61	3.27		2.92	3.01		3.71 3.6 3.32 3.							2.93	2.8		
										3.66							
	3.32	2.85		3.56	2.51		2.69 3.0 3.02 2.8			3.33				3.27 2.78	2.2		
	3.2	3.22		3.53 3.45	3.15		2.75 3.0 2.55 3.3	2 3.67	7 3.11	3.88	3.0	7 3.87	3.49	3.01	3.2	3.3	ь

From these responses, we calculated the average score for each construct by computing the mean across its four indicators. The summarized results are shown in Table 2 below:

Construct	Mean Score	Category
Perceived Usefulness	3.20	High
Perceived Ease of Use	3.16	High
Attitude Toward Using	3.44	Very High
Subjective Norm	2.93	High

Based on the interpretation guideline used in this study (1.00–1.75 = Very Low, 1.76–2.50 = Low, 2.51–3.25 = High, 3.26–4.00 = Very High), the construct Attitude Toward Using (ATU) received the highest average score (3.44), indicating that students generally feel positive about using BYOND. This was followed by Perceived Usefulness (3.20), suggesting that the application is seen as beneficial. Subjective Norm (2.93), although relatively lower, still falls into the "High" category, which suggests moderate influence from peer or social expectations.

To provide a visual summary of these findings, Figure 1 presents a bar chart illustrating the average scores for each TAM construct.



The descriptive results show that students perceive BYOND to be useful and easy to use, and that their attitude toward using it is highly positive. These findings indicate strong potential for adoption among digitally literate students, reinforcing the importance of usability and individual value in influencing acceptance.

2. Discussion

The results of this study confirm the relevance and robustness of the Technology Acceptance Model (TAM) in explaining students' acceptance of the BYOND digital banking application. Among the four constructs, Attitude Toward Using (ATU) obtained the highest mean score (3.44), indicating that students hold a very positive attitude toward using BYOND. This finding supports the argument of Davis (1989) that a positive attitude serves as a critical mediator in influencing user behavior toward technology adoption.

The high mean score for Perceived Usefulness (PU = 3.20) also demonstrates that students perceive the BYOND application as beneficial for their daily financial activities. This result is in line with Zhou et al. (2022), who found that PU is a significant predictor of adoption behavior in Islamic fintech applications. Similarly, Shaikh and Karjaluoto (2021) emphasized that Generation Z tends to adopt digital banking platforms that offer practical utility and efficiency.

Perceived Ease of Use (PEOU = 3.16) was also rated in the "high" category, suggesting that users feel that the BYOND application is user-friendly and easy to navigate. This aligns with findings from Chatterjee et al. (2023), who reported that the ease of interaction with digital apps positively influences acceptance, especially when combined with perceived usefulness.

Subjective Norm (SN = 2.93), although lower than the other constructs, still falls within the "high" range. This implies that social influence—such as recommendations from peers or family—has some impact on students' decision to use BYOND, but it is not the dominant factor. This finding is consistent with Rosyada et al. (2021), who noted that social influence tends to be less influential among digitally literate populations who make independent technology choices.

Taken together, these results suggest that the success of BYOND by BSI in the student segment is largely determined by its perceived personal benefits and usability, rather than peer pressure or external expectations. Therefore, to enhance student adoption, developers should focus on improving in-app features that directly enhance performance and user experience, while

communication strategies may benefit from testimonials or endorsements that reinforce value rather than solely relying on peer influence.

Theoretical implications of this study support the extension of TAM in the context of Islamic digital banking applications, especially when addressing Gen Z users. The strong positive responses across all four constructs validate the model's applicability in this specific setting and encourage future research to integrate additional variables such as trust, user satisfaction, or perceived compatibility.

Conclusion

This study aimed to assess the level of student acceptance of the BYOND digital banking application developed by Bank Syariah Indonesia (BSI), using the Technology Acceptance Model (TAM) as the theoretical framework. Based on a descriptive analysis of responses from 100 Digital Marketing students at Universitas Negeri Jakarta, the findings reveal that the level of acceptance is generally high across all four TAM constructs.

Among the constructs, Attitude Toward Using (ATU) recorded the highest score, followed by Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Subjective Norm (SN). These results indicate that students not only perceive the application as beneficial and user-friendly, but they also demonstrate a strong willingness to adopt the platform independently of external influences.

The study confirms that TAM is a relevant and effective model for explaining user acceptance in the context of Islamic digital banking. Practical implications suggest that to increase adoption, developers and marketers of BYOND should continue enhancing the app's functionality and usability, while also promoting its value through personalized user experiences. Future research may consider extending the model by integrating variables such as trust, satisfaction, or perceived compatibility to gain deeper insights into long-term user engagement.

References

- Chatterjee, S., Rana, N. P., Tamilmani, K., Sharma, A., & Dwivedi, Y. K. (2023). Attitude and loyalty intention toward digital wallets: Extending UTAUT2 with trust and security. Journal of Retailing and Consumer Services, 72, 103195. https://doi.org/10.1016/j.jretconser.2023.103195
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340. https://doi.org/10.2307/249008
- Otoritas Jasa Keuangan. (2022). Survei Nasional Literasi dan Inklusi Keuangan 2022. https://www.ojk.go.id/id/berita-dan-kegiatan/publikasi/Pages/Survei-Nasional-Literasi-dan-Inklusi-Keuangan-2022.aspx
- Rosyada, D., Sari, A. I., & Pratama, M. H. (2021). Pengaruh perceived usefulness terhadap minat penggunaan ShopeePay pada mahasiswa. Jurnal Ekonomi dan Bisnis Digital, 4(2), 45–53. https://doi.org/10.31294/jeco.v4i2.11215
- Shaikh, A. A., & Karjaluoto, H. (2021). Mobile banking adoption: A literature review and research agenda. International Journal of Bank Marketing, 39(1), 86–112. https://doi.org/10.1108/IJBM-10-2019-0380 Somantri, Y. (2022). Statistik untuk penelitian pendidikan. CV Jejak.
- Zhou, Y., Wang, Y., & Yang, L. (2022). Factors influencing consumers' adoption of Islamic fintech services in China: An extended TAM approach. Journal of Islamic Marketing, 13(5), 1115–1134. https://doi.org/10.1108/JIMA-06-2021-0193